

ART. V.—*Journal of the Mission which visited Bootan, in 1837-38, under Captain R. BOILEAU PEMBERTON. By W. GRIFFITH, Esq. Madras Medical Establishment.**

The Mission left Gowahatti on the 21st December, and proceeded a few miles down the Burrumpootur to Ameengoung, where it halted.

On the following day it proceeded to Hayoo, a distance of thirteen miles. The road, for the most part, passed through extensive grassy plains, diversified here and there with low rather barren hills, and varied in many places by cultivation, especially of *sursoo*. One river was forded, and several villages passed.

Hayoo is a picturesque place, and one of considerable local note; it boasts of a large establishment of priests, with their usual companions, dancing girls, whose qualifications are celebrated throughout all Lower Assam. These rather paradoxical ministers are attached to a temple, which is by the Booteas and Kampas considered very sacred, and to which both these tribes, but especially the latter, resort annually in large numbers. This pilgrimage, however, is more connected with trading than religion, for a fair is held at the same time. Coarse woollen cloths and rock salt form the bulk of the loads which each pilgrim carries, no doubt as much for the sake of profit as of penance. The village is a large one, and situated close to some low hills; it has the usual Bengal appearance the houses being surrounded by trees, such as betel palms, peepul, banyan, and caoutchouc. To Nolbharee we found the distance to be nearly seventeen miles. The country throughout the first part of the march was uncultivated, and entirely occupied by the usual coarse grasses; the remainder was one sheet of paddy cultivation, interrupted only by topes of bamboos, in which the villages are entirely concealed; we found these very abundant, but small: betel palms continued very frequent, and each garden or enclosure was surrounded by a small species of screw pine, well adapted for making fences.

Four or five streams were crossed, of which two were not fordable: jheels were very abundant, and well stocked with water fowl and waders. At this place there is a small bungalow for the accommodation of the civil officer during his annual visit; it is situated close to a rather broad but shallow river. There is likewise a bund road.

We proceeded from this place to Dum-Dumma, which is on the Bootan boundary, and is distant ten miles from Nolbharee. We continued through a very open country, but generally less cultivated than

* Presented by the Government.

that about Nolbharee; villages continued numerous as far as Dum-Dumma. This is a small straggling place on the banks of a small stream, the Noa Nuddee; we were detained in it for several days, and had the Booteas alone been consulted, we should never have left it to enter Bootan in this direction. The place I found to be very uninteresting.

December 31st. We left for Hazaregoung, an Assamese village within the Bootan boundary.

We passed through a much less cultivated country, the face of which was overrun with coarse grassy vegetation. No attempts appeared to be made to keep the paths clean, and the farther we penetrated within the boundary, the more marked were the effects of bad government. We crossed a small and rapid stream, with a pebbly bed, the first indication of approaching the Hills we had as yet met with. The village is of small extent, and provided with a Nam-ghur in which we were accommodated: it is situated on comparatively high ground, the plain rising near it, and continuing to do so very gradually until the base of the Hills is reached. There is scarcely any cultivation about the place.

We left on January 2d for Ghoorgoung, a small village eight miles from Hazaregoung; similar high plains and grassy tracts, almost unvaried by any cultivation, were crossed; a short distance from the village we crossed the Mutanga, a river of some size and great violence during the rains, but in January reduced to a dry bouldery bed. There is no cultivation about Ghoorgoung, which is close to the Hills, between which and the village there is a gentle slope covered with fine sward.

We entered the Hills on the 3d, and marched to Dewangari, a distance of eight miles. On starting we proceeded to the Durunga Nuddee, which makes its exit from the Hills about one mile to the west of Ghoorgoung, and then entered the Hills by ascending its bed, and we continued doing so for some time, until in fact we came to the foot of the steep ascent that led us to Dewangari. The road was a good deal obstructed by boulders, but the torrent contains at this season very little water.

The mountains forming the sides of the ravine are very steep, in many cases precipitous, but not of any great height. They are generally well wooded, but never to such a degree as occurs on most other portions of the mountainous barriers of Assam. At the height of about 1000 feet we passed a choky, occupied by a few Booteas, and this was the only sign of habitation that occurred.

We were lodged in a temporary hut of large size, some 200 feet below the ridge on which Dewangari is situated; our access to that

place being prohibited, as the Booteas, although long before informed of our approach and intentions, were not quite certain of our designs.

On the following day, after some fuss, we were allowed to ascend to the village, in which a pucka house had been appropriated for our accommodation.

Dewangari, the temples of which are visible from the plains of Assam, is situated on a ridge, elevated about 2100 feet above the level of the sea, and 1950 above that of the plains. The village extends some distance along the ridge, as well as a little way down its northern face. The houses, which are in most cases mere huts, amount to about 100; they are distributed in three or four scattered groups; amongst these a few pucka or stone-built houses of the ordinary size and construction occur; the only decent one being that occupied by the Soobah, who is of inferior rank.

Along the ridge three or four temples of the ordinary Boodhistical form occur; they are surrounded with banners bearing inscriptions, fixed longitudinally to bamboos. Attached to some of these temples are monumental walls of poor construction, the faces of which bear slabs of slate, on which sacred sentences are well carved.*

The village abounds in filth. The centre of the ridge is kept as a sort of arena for manly exercises; about this space there occur some picturesque simool trees, and a few fig trees, among which is the banyan.

There is no water course or spring near the village; the supply is brought from a considerable distance by aqueducts formed of the hollowed-out trunks of small trees. In one place this aqueduct is carried across a slip, but otherwise there is nothing tending to shew that difficulties existed, or that much skill would have been exerted had such really occurred.

During our long stay at this place we had many opportunities of forming acquaintance with the Soobah, as well as with the immediately adjoining part of his district. We found this almost uncultivated, and overran with jungle. No large paths were seen to point out that there are many villages near Dewangari; in fact the only two which bear marks of frequent communication, are that by which we ascended, and one which runs eastward to a picturesque village about half a mile distant, and which also leads to the plains.

The Soobah we found to be a gentlemanly unassuming man; he received us in a very friendly manner and with some state; the room

* Both to the east and west of Dewangari there is a picturesque religious edifice, with ornamented windows. Their effect is much heightened by the presence of the weeping Cypress, which situated as it was here, gave me an idea of extreme beauty.

was decently ornamented, and set off in particular by some well executed Chinese religious figures, the chief of which we were told represented the Dhurma Rajah, whose presence even as a carved block was supposed to give infallibility. We were besides regaled with blasts of music. His house was the most picturesque one that I saw, and had some resemblance, particularly at a distance, to the representations of some Swiss cottages. It was comparatively small, but as he was of inferior rank, his house was of inferior size.

The Soobah soon returned our visit, and in all his actions evinced friendship, and gentlemanly feeling; and we soon had reason to find that among his superiors at least we were not likely to meet with his like again. His followers were not numerous, nor, with the exception of one or two who had dresses of scarlet broad-cloth, were they clothed better than ordinarily.

The population of the place must be considerable; it was during our stay much increased by the Kampa people, who were assembling here prior to proceeding to Hazoo. Most of the inhabitants are pure Booteas; many of them were fine specimens of human build, certainly the finest I saw in Bootan: they were, strange to say, in all cases civil and obliging.

Cattle were tolerably abundant, and principally of that species known in Assam by the name of *Mithans*; they were taken tolerable care of, and picketed in the village at night: some, and particularly the bulls, were very fine, and very gentle. Ponies and mules were not uncommon, but not of extraordinary merits. Pigs and fowls were abundant.

The chief communication with the plains is carried on by their Assamese subjects, who are almost entirely Kucharees: they bring up rice and putrid dried fish, and return with bundles of manjistha.

On the 23rd, after taking a farewell of the Soobah, who gave us the Dhurma's blessing, and as usual decorated us with scarfs, we left for Rydang, the halting house between Dewangari and Kegumpa, and distant eight miles from the former place. We reached it late in the evening, as we did not start until after noon. We first descended to the Deo-Nuddee, which is 800 or 900 feet below the village, and which runs at the bottom of the ravine, of which the Dewangari ridge forms the southern side, and we continued ascending its bed, almost entirely throughout the march.

The river is of moderate size, scarcely fordable however in the rains; it abounds with the fish known to the Assamese by the name of Bookhar, and which are found throughout the mountain streams of the boundaries of the province. They, like all others, are considered

sacred, although after the first distrust had worn off, the Soobah did not object to my fishing. We passed a Sam Gooroo* engaged in building a wooden bridge; he was the only instance I met with of a Bootea priest making himself useful. He inquired of Capt. Pemberton, with much condescension, of the welfare of the 'Goombhaneer' and his lordship the Governor General.

24th. Left for Khegumpa. The march was almost entirely an uninterrupted ascent, at least until we had reached 7000 feet, so that the actual height ascended amounted nearly to 5000 feet. It commenced at first over sparingly wooded grassy hills, until an elevation of about 4000 feet was attained, when the vegetation commenced to change; rhododendrons, and some other plants of the same natural family making their appearance. Having reached the elevation of 7000 feet by steep and rugged paths, we continued along ridges well clothed with trees, literally covered with pendulous mosses and lichens, the whole vegetation being extra tropical. At one time we wound round a huge eminence, the bluff and bare head of which towered several hundred feet above us, by a narrow rocky path or ledge overhanging deep precipices; and thence we proceeded nearly at the same level along beautiful paths, through fine oak woods, until we reached Khegumpa. The distance to which, although only eleven miles, took us the whole day to perform.

This march was a beautiful, as well as an interesting one, owing to the changes that occurred in the vegetation. It was likewise so varied, that although at a most unfavourable season of the year, I gathered no fewer than 130 species in flower or fruit. Rhododendrons of other species than that previously mentioned, oaks, chesnuts, maples, violets, primroses, &c., &c. occurred. We did not pass any villages, nor did we meet with any signs of habitation, excepting a few pilgrims proceeding to Hazoo.

Khegumpa itself is a small village on an exposed site; it does not contain more than twelve houses, and the only large one, which as usual belonged to a Sam Gooroo, appeared to be in a ruinous state. The elevation is nearly 7000 feet. The whole place bore a wintery aspect, the vegetation being entirely northern, and almost all the trees having lost their leaves. The cold was considerable, although the thermometer did not fall below 46°. The scarlet tree rhododendron was common, and the first fir tree occurred in the form of a solitary specimen of *Pinus excelsa*. In the small gardens attached to some of the

* So are they called from their peculiar sanctity. *Sam* is a priest, and *Gooroo* also a priest; each priest is therefore twice a priest.]

houses I remarked vestiges of the cultivation of tobacco and Probosa.* In the vallies however surrounding this place there seemed to be a good deal of cultivation, of what nature distance prevented me from ascertaining.

25th. Left for Sasee. We commenced by descending gradually until we had passed through a forest of oaks, resembling much our well known English oak; then the descent became steep, and continued so for sometime; we then commenced winding round spurs clothed with humid and sub-tropical vegetation; continuing at the same elevation we subsequently came on dry open ridges, covered with rhododendrons. The descent recommenced on our reaching a small temple, about which the long leaved fir was plentiful, and continued without interruption until we reached a small torrent. Crossing this, we again ascended slightly to descend to the Dimree river, one of considerable size, but fordable. The ascent recommenced immediately, and continued uninterruptedly at first through tropical vegetation, then through open rhododendron and fir woods, until we came close upon Sasee, to which place we descended very slightly. This march occupied us the whole day. After leaving the neighbourhood of Khegumpa we saw no signs of cultivation; the country, except in some places, was arid; coarse grasses, long leaved firs, and rhododendrons forming the predominating vegetation. We halted at Sasee, which is a ruined village, until the 28th. The little cultivation that exists about it is of barley, buckwheat, and hemp.

28th. We commenced our march by descending steeply and uninterruptedly to the bed of the Geeri, a small torrent, along which we found the vegetation to be tropical; ascending thence about 500 feet, we descended again to the torrent, up the bed of which we proceeded for perhaps a mile; the ascent then again commenced, and continued until we reached Bulphai. The path was generally narrow, running over the flank of a mountain whose surface was much decomposed; it was of such a nature that a slip of any sort would in many places have precipitated one several hundred feet. The face of the country was very barren, the trees consisting chiefly of firs and rhododendrons, both generally in a stunted state. We reached Bulphai late in the evening; and the latter part of the march was very uncomfortable owing to the cutting severity of the wind. The vegetation was not interesting until we came on a level with Bulphai, when we came on oaks and some other very northern plants. We were well accommodated in this village, which is a very small one, situated in a somewhat

* *Eleusine coracana.*

sheltered place, and elevated to 6800 feet above the sea. The surrounding mountains are very barren on their southern faces, while on the northern, or sheltered side, very fine oak woods occur. The houses were of a better order than those at Sasee, and altogether superior to those of Khegumpa. They are covered in with split bamboos, which are secured by rattans, a precaution rendered necessary by the great violence of the winds, which at this season blow from the south or south-east. Bulphai is a bitterly cold place in the winter, and there is scarcely any mode of escaping from its searching winds. The vegetation is altogether northern, the woods consisting principally of a picturesque oak, scarcely ever found under an elevation of 6000 feet. There is one small patch of cultivation, thinly occupied by abortive turnips or radishes, and miserable barley. It was at this place that we first heard the very peculiar crow of true Bootan cocks, most of which are afflicted with enormous corns.

On the 31st we resumed our journey, ascending at first a ridge to the N. E. of Bulphai, until we reached a pagoda, the elevation of which proved to be nearly 8000 feet; and still above this rose to the height of about 10,000 feet a bold rounded summit, covered with brown and low grass. Skirting this at about the same level as the pagoda, we came on open downs, on which small dells, tenanted by well defined oak woods were scattered. After crossing these downs, which were of inconsiderable extent, we commenced to descend, and continued doing so until we came to Roongdoong. About a third of the way down we passed a village containing about twenty houses, with the usual appendage of Sam Gooroo's residence; and still lower we came upon a picturesque temple, over which a beautiful weeping cypress hung its branches. We likewise passed below this a large temple raised on a square terraced basement. From this the descent is very steep, until a small stream is reached, from which we ascended very slightly to the castle of Roongdoong, in the *loftiest* part of which we took up our quarters. From the time that we descended after crossing the downs, the country had rather an improved aspect, some cultivation being visible here and there. We met a good many Kampas, pilgrims, and one chowry tailed cow, laden with rock salt, which appears to be the most frequent burden.

There was more cultivation about Roongdoong than any other place we had yet seen, although even here it was scanty enough. It would appear that they grow rice in the summer, and barley or wheat during the winter; and this would seem to be the case in all those places of sufficient altitude where the fields were terraced. The elevation of the place is 5175 feet, yet a few orange trees appeared to flourish;

this was the highest elevation at which we saw these trees living. There is a species of *Atriplegia*, the *Mooreesa* of the Assamese, likewise cultivated about Roongdoong: the seeds are eaten as well as the leaves, which form a sort of *turkaree*. The ingenuity of the Bootees was well shewn here by the novel expedient of placing stones under the ponies' feet to enable them to get at the contents of the mangers! The ponies appeared tolerably well fed, at least I saw them enjoy one good meal, consisting of wild tares and the heads of Indian corn, which had been previously soaked; besides these luxuries, they were supplied with a slab of rock as a rolling stone or scratch-back. Our host, the Dhoompa, who is appointed by the Deb himself, was an impudent drunken fellow, and presumed amazingly on his low rank. He was one of the most disagreeable and saucy persons we met with in Bootan.

Feb. 1st. Our march commenced by descending, gradually at first and then very rapidly, to the Dumree Nuddee; crossing this, which is of small size, at the junction of another torrent, we wound along the face of the mountain forming the right wall of the ravine, ascending very gradually at the same time. We continued thus until we came on the ravine of the Monass, which we followed upwards, the path running about 1000 feet above its bed for about two miles, when we reached Benka. We passed two or three small villages on the right side of the Dumree, and a few others were seen on its left. The country throughout was of a most barren appearance, the vegetation consisting of coarse grasses, stunted shrubs, and an occasional long leaved pine. Benka, or as it is better known Tassgong, is a small place situated on a precipitous spur, 1200 feet below which, on one side, the Monass roars along, and on the other a much smaller torrent. From either side of the village one might leap into eternity: it is elevated 3100 feet above the sea.

We were lodged in a summer house of the Soobah, about half a mile up the torrent, and in which, as it was an open house, and as they kept the best room locked up on the score of its being sacred, we were much incommoded by the furious gusts of wind sweeping as usual up the ravine.

The place itself is the Gibraltar of Bootan, consisting of a large square residence for the Soobah, decorated in the usual manner, of a few poor houses much crowded together, and the defences. These consist of round towers of some height, and a wall which connects the village with the tower; and on the opposite side of the torrent there are other defences of towers and outhouses. All seemed to be in a somewhat ruinous state.

A few days after our arrival we had an interview with the Soobah, on the open spot in front of our residence. On this he had caused to be pitched a small silken pavilion, about half the size of a sipahis' paul. He came in all possible state, with about thirty armed followers, preceded by his state band, which consisted of a shrill clarionet and a guitar, (guiltless of sound) a gong and a bell, ponies, a Tartar dog, gentlemen of the household, priests, all assisted in forming a long string which advanced in single file.

He was polite and obliging, and maintained his rank better than any other of the Soobahs we saw. After the interview, at the end of which presents of decayed plantains, papers of salt, scarfs, and strips of coarse blanket were returned, we were treated with music and dancing women, who only differed from their compeers of India in being elderly, ugly, very dirty, and poorly dressed. The spectators were then seated on the ground and regaled with rice and chong.

On his departure the noise far exceeded that attending on his advent. Shrieks and outcries rent the air, the musketoons made fearful report, and, in fact, every one of the followers, of sufficiently low rank, made as much noise as he could. The most curious parts of the ceremony were,—the manner in which they shuffled the Soobah off and on his pony; the mode in which the ponies' tails were tied up; and the petition of the head of the priests for at least one rupee.

It was here that we first heard of the deposition of the old Deb, and the consequent disturbances.

Feb. 5th. Punctually on the day appointed by the Soobah did we leave this place, and descended by a precipitous path to the Monass, which we crossed by a suspension bridge, the best and largest, I suspect, in Bootan. The bed of this river, which is of large size (the banks which are mostly precipitous being sixty or seventy yards asunder) and of great violence is 1300 feet below Benka. We then commenced ascending very gradually, following up the north side of the ravine, until we reached Nulka: the march was a very short one. The country was perhaps still more barren than any we had hitherto seen, scarcely any vegetation but coarse grasses occurring. Near Nulka the long leaved pine recommenced. We passed two miserable villages scarcely exceeded by Nulka, in which we took up our abode. No cultivation was to be seen, with the exception of a small field of rice below Nulka.

Feb. 6th. We descended to the Monass, above which Nulka is situated 6 or 700 feet, and continued along its right bank for a considerable time, passing here and there some very romantic spots, and one or two very precipitous places. On reaching a large torrent, the Koollong,

we left the Monass, and ascended the former for a short distance, when we crossed it by a wooden bridge. The remainder of the march consisted of an uninterrupted ascent up a most barren mountain, until we reached Kumna, a small and half-ruined village, 4300 feet above the sea.

Little of interest occurred: we passed a small village consisting of two or three houses and a religious building, and two decent patches of rice cultivation. The vegetation throughout was almost tropical, with the exception of the long leaved fir, which descends frequently as low as 1800 or 2000 feet. I observed two wretched bits of cotton cultivation along the Monass, and some of an edible *Labiata*, one of the numerous makeshifts ordinarily met with among Hill people.

Feb. 7th. Left for Phullung. We ascended at first a few hundred feet, and then continued winding along at a great height above the Koollong torrent, whose course we followed, ascending gradually at the same time, until we reached our halting place. As high as 5000 feet the Kumna mountain retained its very barren appearance; at that elevation stunted oaks and rhododendrons commenced, and at 5300 feet the country was well covered with these trees, and the vegetation became entirely northern.

Throughout the march many detached houses were visible on the opposite bank of the Koollong, and there appeared to be about them a good deal of terrace cultivation. On the left side of the torrent two villages were seen, both as usual in a ruinous state.

8th, and 9th.—We were detained partly by snow, partly by the non-arrival of our baggage. On the 9th I ascended to a wood of *Pinus excelsa*, the first one I had noticed, and which occurred about 1000 feet above Phullung. The whole country at similar elevations was covered with snow, particularly the downs which we passed after leaving Bulphei. Tassgong was distinctly visible. The woods were otherwise composed of oaks and rhododendrons. At Phullung they were endeavouring to keep alive the wild indigo of Assam; a species of *Ruellia*, but its appearance shewed that it was unsuited to the climate.

Feb. 10th. To Tassangsee. We continued through a similar country, and at a like elevation, with the exception of a trifling descent to a small nullah, and an inconsiderable one to the Koollong, on the right bank of which, and about 500 feet above its bed, Tassangsee is situated. We crossed this torrent, which even here is of considerable size and not fordable, by means of an ordinary wooden bridge, and then ascended to the village. This is constituted almost entirely by the Soobah's house, which is a large quadrangular building; on the same side, but several hundred feet above the house,

there is a large tower ; also a small one on the same level, and some religious edifices. We were lodged over the stable.

The country about Tassangsee is picturesque, with large woods of *Pinus excelsa*, which here has much the habit of a larch, a few villages are visible on the same side of the Koollong, and a little cultivation. The Soobah was absent at Tongsa, to which place he had been summoned owing to the disturbances, so that we were relieved from undergoing the usual importunities and disgrèmens between his followers and ours. The place is said to be famous for its copper manufactures, such for instance as copper cauldrons of large dimensions ; but I saw nothing indicating the existence of manufacturers, unless it were a small village below the castle, and on the same side of the Koollong, which looked for all the world like the habitation of charcoal burners. A little further up this stream a few small flour mills occur.

Snow was visible on the heights around, and especially on a lofty ridge to the north. We found Tassangsee to be very cold owing to the violent south or south-east winds ; the thermometer however did not fall below 34°. Its elevation is 5270 feet, the vegetation entirely northern, consisting of primroses, violets, willows, oaks, rhododendrons, and pines ; very fine specimens of weeping cypress occur near this place.

Feb. 14th. Resumed our journey, interrupted as usual by the non-arrival of our baggage, and scarcity of coolies—and proceeded to Sanah. We descended at first to the torrent, which bounds one side of the spur on which the castle is built, and which here falls into the Koollong ; the march subsequently became a gradual and continued ascent, chiefly along its bed. We crossed two small torrents by means of rude flat wooden bridges, and passed two or three deserted villages. Snow became plentiful as we approached Sanah. This we found to be a ruined village, only containing one habitable house. It is situated on an open sward, surrounded with rich woods of oaks and rhododendrons, yews, bamboos, &c. Its elevation is very nearly 8000 feet.

Feb. 15th. We started at the break of day, as we had been told that the march was a long and difficult one. We proceeded at first over undulating ground, either with swardy spots, or through romantic lanes ; we then ascended an open grassy knoll, after passing which we came on rather deep snow. The ascent continued steep and uninterrupted until we reached the summit of a ridge 11,000 feet high. Although we had been told that each ascent was the last, we found that another ridge was still before us, still steeper than the

preceding one, and it was late in the day before we reached its summit, which was found to be nearly 12,500 feet. Above 9500 feet, the height of the summit of the grassy knoll before alluded to, the snow was deep; above 10,000 feet all the trees were covered with hoar-frost, and icicles were by no means uncommon. The appearance of the black pines, which we always met with at great elevations, was rendered very striking by the hoar-frost. Every thing looked desolate, scarce a flower was to be seen, and the occasional fall of hail and sleet added to the universal gloom.

The descent from the ridge was for the first 1500 feet, or thereabout, most steep, chiefly down zigzag paths, that had been built up the faces of precipices; and the ground was so slippery, the surface snow being frozen into ice, that falls were very frequent, but happily not attended with injury. It then became less steep, the path running along swardy ridges, or through woods. In the evening I came on the coolies, who had halted at a place evidently often used for that purpose, and who positively refused to proceed a single step further. But as Captain Pemberton and Lieut. Blake had proceeded on, I determined on following them, hoping that my departure would stimulate the coolies to further exertions. After passing over about a mile of open swardy ground I found myself benighted on the borders of a wood, into which I plunged in the hopes of meeting my companions; after proceeding for about half an hour slipping, sliding, and falling in all imaginable directions, and obtaining no answers to my repeated halloos; after having been plainly informed that I was a blockhead by a hurkarah, who as long as it was light professed to follow me to the death—"Master go on, and I will follow thee to the last gasp with love and loyalty"—I thought it best to attempt returning, and after considerable difficulty succeeded in reaching the coolies at 8½ P. M. when I spread my bedding under a tree, too glad to find one source of comfort.

I resumed the march early next morning, and overtook my companions about a mile beyond the furthest point I had reached; and as I expected, found that they had passed the night in great discomfort. We soon found how impossible it would have been for the coolies to have proceeded at night, as the ground was so excessively slippery from the half melted snow, and from its clayey nature, that it was as much as they could do to keep their legs in open day-light.

We continued descending uninterruptedly, and almost entirely through the same wood, until we reached Singé at 9½ A. M. The total distance of the march was fifteen miles—the greatest amount of ascent was about 4500 feet, of descent 6100 feet. We remained at

Singé up to the 18th, at which time some coolies still remained behind. This village, which is 6330 feet above the sea, is of moderate size, containing about twelve houses; in the best of these we were lodged, and it really was a good house, and the best by far we were accommodated with while in Bootan.

On the night of the 17th snow fell all around, though not within 1000 feet of Singé. The comparative mildness of the climate here was otherwise indicated by the abundance of rice cultivation about and below it. It stands on the border of the wooded and grassy tracts so well marked in the interior of Bootan, at least in this direction, and about midway on the left side of a very deep ravine, drained by the river Koosee. On both sides of this, villages were plentiful; on the opposite or western side alone I counted about twenty; about all there is much cultivation of rice and wheat; the surface of the earth where untilled, being covered with grassy vegetation and low shrubs.

Feb. 18th. We commenced a steep descent, and continued it until we came in sight of the river Koosee, which is not visible from Singé. We then turned to the north, following the course of the river upwards, the path running about 800 feet above its bed. Thence, after descending another ravine, drained by a tributary to the Koosee, we again ascended slightly, to re-descend to the Koosee, up the bed of which we then kept until we came to the Khoomar, a considerable torrent, which we crossed about 100 yards from its mouth by a wooden bridge; within a quarter of a mile of this we crossed the Koosee itself by a similar bridge, and then ascended gradually along its right bank until we reached Singlang, which place became visible after passing the Khoomar.

After arriving at the Koosee the country became barren, resembling much that about Tassgong; and the only cultivation we passed in this portion of the march was some rice along the bed of that river.

The usual delays took place at Singlang, and as it was the residence of a Soobah, we suffered the usual inconveniences. We were miserably lodged in a small open summer house, up a small ravine, and at a short distance from the castle, which is a large and rather irregular building.

The village itself is a poor one, most of the inhabitants being quartered in the castle. We had an interview with the Soobah in an open place close to the village: it was conducted with much less state than that at Tassgong. We found the Soobah to be very young, in fact almost a boy; he behaved civilly, and without any pretension. None of his armed men were present, and the whole number of Booteas collected to see the show could not have exceeded 100. We

sat in the open air, while the Soobah was sheltered by a paltry silken canopy. Nachnees more than ordinarily hideous were in attendance.

There is but little cultivation about this place, which is 4520 feet above the sea, and the surrounding mountains are very barren. About the village I noticed a few stunted sugar canes, some peach and orange trees, the castor-oil plant, and a betel vine or two. The only fine trees near the place were weeping cypresses; the simul also occurs.

Feb. 23rd. After the usual annoyances about coolies and ponies, we left Singlang without regret, for it was a most uninteresting place. We commenced by an ascent of about 1000 feet, and then continued following the course of the Koosee *downwards*. We continued retracing our steps until we reached Tumashoo, to which place we scarcely descended, and on arriving found ourselves opposite Singé, and not more, as the crow flies, than three miles from it. We were told subsequently that there was a direct road from Singé to this, which is about the centre of the populous parts of the country I have mentioned as being visible from Singé; so that it was quite plain that we had been taken so much out of our way in order to gratify the Soobah by enabling him to *return* us some decayed plantains, balls of ghee, and dirty salt. The road throughout was good, and evidently well frequented. At an elevation of about 6000 feet we came on open woods of somewhat stunted oaks and rhododendrons; the only well wooded parts we met with being such ravines as afforded exit to water courses. We passed several villages in the latter part of the march, some containing 20 and 30 houses, and met with a good deal of cultivation as we traversed that tract, the improved appearance of which struck us so much from Singé.

Tumashoo is an ordinary sized village, about 5000 feet in elevation. We were lodged in the Dhoompá's house. I observed that the cattle here, which were *Mithans*, were kept in farm yards, better supplied with straw than the poor beasts themselves. A few sheep were likewise seen.

Feb. 24th. Left for Oonjar, ascending at first over sward or through a fir wood for about 800 feet, when we crossed a ridge, and thence descended until we came to a small torrent which we crossed; thence we ascended gradually, until we surmounted a ridge 7300 feet high; descending thence very gradually until we came over Oonjar, to which place we descended by a steep by-path for a few hundred feet. The road was generally good, winding along at a considerable height above the Koosee, until we finally left it on its turning to the south. Singé was in sight nearly the whole day. The

features of the country were precisely the same. At the elevation of 7300 feet the woods became finer, consisting of oaks and rhododendrons, rendered more picturesque from being covered with mosses, and a grey pendulous lichen, a sure indication of considerable elevation. Various temples and monumental walls were passed, and several average sized villages seen in various directions. A fine field of peas in full blossom was noticed at 5500 feet, but otherwise little cultivation occurred. Oonjar is a small village at an elevation of 6370 feet.

Feb. 25th. Leaving this place, we continued winding along nearly at the same altitude until we descended to the river Oonjar, which drains the ravine, on the right flank of which the village is situated. This river, which is of moderate size, is crossed twice within 200 yards. From the second bridge one of the greatest ascents we had yet encountered commenced; it was excessively steep at first, but subsequently became more gradual. It only terminated with our arrival at the halting place, which we denominated "St. Gothard," but which is known by the name Peemee. Its elevation is about 9700 feet, and we had ascended from the bridge as much as 4350 feet. Snow commenced at 7500 feet, and became heavy at 8500 feet; Peemee was half buried in it, and ornamented with large icicles: it consists of one miserable hut. This hut would not have withstood the attacks of another such party as ours, for the men made use of its bamboos for firewood, and the horses and mules eat very large portions of it. Our people were put considerably out from not considering it proper to use snow water, the only fluid to be procured, as there is no spring near.

Feb. 26th. We continued the ascent through heavy snow. For the first 1000 feet it was easy enough, but after that increased much in difficulty. Great part of the path was built up faces of sheer precipices. About noon we passed through the pass of Rodoola, which consists of a gap between two rocks, barely wide enough to admit a loaded pony. One of the rocks bore the usual slab with the mystic sentence "*Oom mainee pamee oom.*" There is nothing striking in the place, which besides is not the highest part of the mountain traversed. The elevation was found to be 12,300 feet.

The remainder of the ascent was very gradual, but continued for about $1\frac{1}{2}$ miles; and I consider the actual pass from which we commenced descending to be at least 12,600 feet. The descent was at first very rapid, passing down the bold face of the mountain, which was covered entirely with stout shrubby rhododendrons. We then descended gradually through a fine wood of the black fir. On recommencing the steep descent we passed over swardy patches surrounded

by fir woods, and we continued through similar tracts until within 1000 feet of our halting place, to which we descended over bare sward.

The march, which was one of thirteen miles, lasted nine hours; the greatest ascent was nearly 4000 feet, the greatest descent nearly 5000 feet. It was with great difficulty that many of our followers succeeded in effecting it: with the usual apathy of natives, they wanted to remain in a ruined log hut, at an elevation of 12,500 feet, without food, instead of pushing on. Capt. Pemberton very properly ejected them all, and when once they had passed the snow, they regained a good deal of their miserable spirit. The road throughout the ascent was buried in snow, the depth of which alone enabled us to cross one very bad place where the constructed road appeared to have given way, and at which most of our ponies had narrow escapes. On the descent the snow became scanty at 9500 feet, and at 9000 feet disappeared almost entirely, lingering only in those places which throughout the day remain obscured in shade.

From the summit of Rodoola a brief gleam of sunshine gave us a bird's-eye view of equally lofty ridges running in every direction, all covered with heavy snow.

The vegetation of the ascent was very varied, the woods consisting of oaks, rhododendrons, and bamboos, up to nearly 11,000 feet. Beyond this the chief tree was the black fir; junipers, alpine polygonums, a species of rhubarb, and many other alpine forms presented themselves in the shape of the withered remains of the previous season of active vegetation. That on the descent was less varied, the trees being nearly limited to three species of pines, of which the black fir scarcely descended below 11,600 feet, when it was succeeded by a more elegant larchlike species, which I believe is *Pinus Smithiana*; this again ceased toward an altitude of 9500 feet, when its place was occupied by *Pinus excelsa*, now a familiar form.

We found Bhoomlungtung to occupy a portion of rather a fine valley. The village is of moderate size, but of immoderate filth, only exceeded in this respect by its tenants, to whom no other Booteas could come near in this, as it would seem, necessary qualification of an inhabitant of a cold, bleak, mountainous country; it is situated on the left bank of a good sized stream. We were lodged in the chief house, but were annoyed beyond measure by the smoke arising from a contiguous cook room, in which operations were going on day and night. The valley is not broad, but is two or three miles in length: it is surrounded on all sides, but especially to the south and east by lofty mountains. The elevation of Bhoomlungtung is nearly 8700 feet,

and we considered it to be the most desirable spot we had yet met with.

The valley is for the most part occupied by wheat fields, but the prospect of a crop appeared to me very faint. Two or three villages occur close to Bhoomlungtung. The tillage was better than any we had seen, the fields being kept clean, and actually treated with manure, albeit not of the best quality; in a few instances they were surrounded with stone walls, as were the court yards of all the houses, but more commonly the inroads of cattle were considered sufficiently prevented by strewing thorny branches here and there. The houses were of ordinary structure, but unspeakably filthy.

With the exception of a sombre looking oak near Bhoomlungtung, and some weeping willows, the arboreous vegetation consists entirely of firs. The shrubby vegetation is northern, and so is the herbaceous, but the season for this had not yet arrived. It was here that I first met with the plant called after Mr. James Prinsep; the compliment is not, in Bootan at least, enhanced by any utility possessed by the shrub, which is otherwise a thorny, dangerous looking species. Here too we first saw English looking magpies, larks, and red-legged crows.

March 1st. Proceeded to Byagur or Juggur. We were told that the march was a short one, and that we should continue throughout down the bed of the Tung-Tchien, the river of Bhoomlungtung; we found, however, that we soon had to leave this, and commence ascending. After a second descent to a small nullah, we encountered a most tedious ascent, which continued until we surmounted a ridge overlooking Byagur, to which place we descended very rapidly. The height of this ridge was 9950 feet, yet we did not meet with a vestige of snow. The distance was fourteen miles. We passed two or three small villages, but saw scarcely any vegetation after leaving the valley. The vegetation continued the same, the road traversing either sward or fir woods, consisting entirely of *Pinus excelsa*.

The valley in which Byagur is situated is still larger than that of Bhoomlungtung: it is drained by a large river which is crossed by a somewhat dilapidated wooden bridge; the elevation is about 8150 feet. The village so called is a moderately sized one; but there are several others in the valley, which is one of the very few decently inhabited places we met with. The inhabitants are much cleaner than those of Bhoomlungtung. The Soobah was absent at Tongsa; his castle, which is a very large, irregular, straggling building, is situated on a hill 500 feet above the plain, some of its defences, or outworks, reaching nearly to the level of the valley. During the hot weather

it is occupied by Tongsa Pillo, on which occasion the Soobah retires to Bhoomlungtung.

The cultivation is similar to that of the other valley, but the crops looked very unpromising. The soil is by no means rich, and the wind excessively bleak; wheat or barley are the only grains cultivated. The mountains which hem in this valley are not very lofty; to the north, in the back ground, perpetual snow was visible. To our west was the ridge which we were told we should have to cross, and which in its higher parts could not be less than 12,000 feet.

March 4th. We commenced ascending the above ridge almost immediately on starting; surmounting this, which is of an elevation at the part we crossed of 11,035 feet, we continued for sometime at the same level, through fine open woods of *Pinus Smithiana*: having descended rapidly afterwards to a small nullah, 9642 feet in elevation, we then reascended slightly to descend into the *Jaisa* valley. On the east side of the ridge, i. e. that which overlooks Byagur, we soon came on snow, but none was seen on its western face, notwithstanding the great elevation. The country was very beautiful, particularly in the higher elevations. I may here advert to the bad taste exhibited in naming such objects after persons, with whom they have no association whatever. As it is not possible for all travellers to be consecrated by genera, although this practice is daily becoming more common, we should connect their names with such trees as are familiar to every European. As we have a *Pinus Gerardiana* and *Webbiana*, so we ought to have had *Pinus Herbertiana* and *Moorcroftiana*, &c. By so doing, on meeting with fir trees among the snow-clad Himalayas, we should not only have beautiful objects before us, but beautiful and exciting associations of able and enduring travellers. Of Capt. Herbert, the most accomplished historian of these magnificent mountains, there is nothing *living* to give him a "local habitation and a name." It will be a duty to me to remedy this neglect; and if I have not a sufficiently fine fir tree hitherto undescribed in the Bootan collection, I shall change the name of the very finest hitherto found, and dignify it by the name *Herbertiana*. The prevailing tree was the Smithian pine. We saw scarcely any villages, and but very little cultivation. *Jaisa* is a good sized village; it was comparatively clean, and the houses were, I think, better than most we had hitherto seen. We were lodged in a sort of castle, consisting of a large building, with a spacious flagged court yard, surrounded by rows of offices. The part we occupied fronted the entrance, and its superior pretensions were attested by its having an upper story.

There is a good deal of wheat cultivation around the village, which is not the only occupant of the valley : this is the highest we had yet seen, and is perhaps one of the highest inhabited vallies known, as it is 9410 feet above the sea ; it is drained by a small stream, and is of less extent than either that of Byagur or Bhoomlungtung. The surrounding hills are covered with open fir woods, and are of no considerable height. Larks, magpies, and red-legged crows, continued plentiful, but on leaving this valley we lost them.

March 5th. We proceeded up the valley, keeping along the banks of the stream for sometime ; we then commenced ascending a ridge, the top of which we reached about noon ; its elevation was 10,930 feet. The descent from this was for about 2500 feet very steep and uninterrupted, until we reached a small torrent at an elevation of 8473 feet ; from this we ascended slightly through thick woods of oak, &c. until we came on open grassy tracts, through which we now gradually descended at a great height above the stream, which we had left a short time before. We continued descending rather more rapidly until we came to a point almost immediately above Tongsa, by about 1000 feet ; from this the descent was excessively steep. The distance was 13 miles. On the ascent snow was common from a height of 9000 feet upwards. The vegetation on this, or the eastern side, was in some places similar to that above Byagur. Beautiful fir woods formed the chief vegetation, until we came close to the summit, when it changed completely. Rhododendrons, *Bogh puttah*, and a species of birch, and bamboos, were common, mixed with a few black pines. The woods through which we descended, were in the higher elevations almost entirely of rhododendrons ; and lower down chiefly of various species of oak and maple—the former being dry and very open, the latter humid and choked up with underwood. After coming on the open grassy country we did not revert to well wooded tracts.

No villages occurred, nor did we see any signs of cultivation after leaving the valley of Jaisa until we came near Tongsa, above which barley fields were not uncommon. Tongsa, although the second, or at any rate the third place in Bootan, is as miserable a place as any body would wish to see. It is wretchedly situated in a very narrow ravine, drained by a petty stream, on the tongue of land formed by its entrance into the large torrent Mateesum, which flows 1200 feet below where the castle stands. The village is 6250 feet in altitude : it consists of a few miserable houses, one of the worst of which was considerably lent to us. The castle is a large and rather imposing building, sufficiently straggling to be relieved from heaviness of appearance : it is so overlooked, and indeed almost overhung by some

of the nearest mountains, that it might be knocked down by rolling rocks upon it. It is defended by an outwork about 400 feet above.

The surrounding country is uninteresting, the vegetation consisting of a few low shrubs and some grasses : of the former the most common are a species of barberry, and a hitherto undescribed genus of *Hamelidæ*. No woods can be reached without ascending 12 or 1500 feet.

Barley was the chief cultivation we saw, but the crops alternated with rice, which is here cultivated, as high as 6800 feet. In the gardens attached to the cottages, or rather huts, we observed the almond and pear in full blossom: the only other trees were two or three weeping cypresses and willows, and a solitary poplar.

Our reception was by no means agreeable. I was roared to most insolently to dismount while descending to the castle; our followers were constantly annoyed by the great man's retainers; and, in fact, we got no peace until we had an interview with the Pillo on the 15th. Before the arrival of this personage, who had just succeeded to office, great efforts were made to bring about an interview with the ex-Pillo, and a stoppage of supplies was actually threatened in case of refusal. The firmness of Capt. Pemberton was however proof against all this.

It had been previously arranged that the former Pillo, the uncle of the present one, should be admitted at this interview on terms of equality; this kindness on the part of the nephew being prompted probably by the hopes of securing his uncle's presents afterwards. We were received with a good deal of state, but the apartment in which the meeting took place was by no means imposing, or even well ornamented. The attendants were very numerous, and mostly well-dressed, but the effect of this was lessened by the admission of an indiscriminate mob. We were not admitted however into the presence without undergoing the ordeals which many orientals impose on those who wish for access to them.

We were most struck with the difference in appearance between the old and new Pillos: the former was certainly the most aristocratic personage we saw in Bootan; the latter, a mean looking, bull-necked individual. A novel part of the ceremony consisted in the stirring up of a large can of tea, and the general recital of prayers over it, after which a ladleful was handed to the Pillos, who dipped their forefinger in it, and so tasted it.

The meeting passed off well; and afterwards several less ceremonious and more friendly meetings took place. We took leave on the 22nd. This interview was chiefly occupied in considering the list of presents, which the Pillo requested the British Government would do themselves the favour of sending him. He begged most

unconscionably, and I thought that the list would never come to an end; and he was obliging enough to say, that any thing he might think of subsequently would be announced in writing. He was very facetious, and evidently rejoiced at the idea of securing so many good things at such trifling expense as he had incurred in merely asking for them. Nothing could well exceed the discomfort we had to undergo during our tedious stay at this place. Our difficulties were increased subsequently to our arrival by the occurrence of unsettled weather, during which we had ample proofs that Bootan houses are not always water-proof; we were besides incessantly annoyed with a profusion of rats, bugs, and fleas; nor was there a single thing to counterbalance all these inconveniences, and we consequently left the place without the shadow of a feeling of regret.

On the 23rd of March we resumed our journey; and having traversed the court yard of the castle, we struck down at once to the river Mateesum by a very steep path. Having crossed this by a bridge, we gradually ascended, winding round the various ridges on the right flank of the ravine of this river. We left it when it turned to the southward, in which direction Bagoa-Dooar was visible, and continued ascending gradually until we reached Taseeling, seven miles from Tongsa, and 7230 feet above the sea.

Taseeling consists of a large house, principally used as a halting-place for *chiefs* going to and from Pুনukka and Tongsa. The surrounding mountains are rather bare, as indeed is the country between it and Tongsa. There is some cultivation to be seen around it, and several villages. As we approached Taseeling open oak and rhododendron woods recurred. The vegetation near the Mateesum was subtropical; the road was good, and in one place was built in zigzag up the face of a cliff.

March 24th. To Tchinjipjee. We commenced by ascending until we had surmounted a ridge about 800 feet above Taseeling; during the remainder of the march we traversed undulating ground at nearly the same altitude, at first through an open country, afterward through beautiful oak and magnolia woods, until we came on the torrent above which we had been ascending since leaving the Mateesum; a little farther on we came on the finest temple we had seen, and situated in a most romantic spot. It stood on a fine patch of sward, in a gorge of the ravine, the sides of which were covered with beautiful cedar-looking pines; the back ground was formed by lofty mountains covered with heavy snow.

Following the river upwards for about a mile and a half, we reached Tchinjipjee, which is situated on the right bank of the torrent.

The march was throughout beautiful, particularly through the forest, which abounded in picturesque glades. No villages or cultivation were seen.

Tchinjipjee is perhaps the prettiest place we saw in Bootan; our halting place stood on fine sward, well ornamented with (*Quercus seme carpifolia?*) very picturesque oaks, and two fine specimens of weeping cypress. The surrounding hills are low, either almost entirely bare or clothed with pines. The village is of ordinary size, and is the only one visible in any direction; its elevation is 786 feet. There is some cultivation about it, chiefly of barley, mixed with radishes.

March 27th. We continued following the river upwards, the path running generally at a small height above its bed. Having crossed it by a rude wooden bridge, we diverged up a tributary stream, until we reached a small village; we thence continued ascending over easy grassy slopes, here and there prettily wooded, until we reached the base of the chief ascent, which is not steep, but long, the path running along the margin of a rhododendron and juniper wood: the height of its summit is 10,873 feet. Thence to Rydang was an uninterrupted and steep descent, the path traversing very beautiful woods of rhododendrons, oaks, yews, &c. Snow was still seen lingering in sheltered places above 10,000 feet. The march throughout was beautiful. In the higher elevations the *Bogh Pat* was very common.

Besides the village mentioned, two temporary ones were seen near the base of the great ascent, built for the accommodation of the Yaks and their herdsmen: of this curious animal two herds were seen at some distance.

Rydang is prettily situated towards the bottom of a steep ravine: its elevation is 6963 feet. A few villages occur about it, with some barley and wheat cultivation.

March 28th. We descended directly to the river Gnee, which drains the ravine, and continued down it sometime, crossing it once; then diverging up a small nullah we commenced an ascent, which did not cease until we had reached an elevation of 8374 feet. Continuing for sometime at this elevation we traversed picturesque oak and rhododendron woods, with occasionally swardy spots; subsequently descending for a long time until we reached Santagong.

Oak and rhododendron woods continued common until we approached Santagong, in the direction of which the trees became stunted, and the country presented a barren aspect. Several villages were however seen in various directions, surrounded with cultivation.

Santagong is 6300 feet above the sea ; it is a small village, but the houses are better than ordinary. The surrounding country, especially to the north, is well cultivated, and the villages numerous. The country is bare of trees ; almost the only ones to be seen are some long leaved firs, a short distance below Santagong, close to a small jheel abounding in water fowl.

March 29th. From Santagong we proceeded to Phain, descending immediately to the stream, which runs nearly 1800 feet below our halting place. Crossing this, as well as a small tributary, we encountered a steep ascent of 1000 feet. Subsequently we wound along, gradually ascending at the same time, until we reached an inconsiderable ridge above Phain, to which place we descended slightly. The distance was six miles. The country was bare in the extreme, and after crossing the stream above mentioned, villages became rather scanty. Towards Phain the soil became of a deep red colour.

This place, which is 5280 feet above the sea, is a small village, containing six or seven tolerable houses. The country is most uninteresting and uninviting, scarce a tree is to be seen, the little vegetation that does exist consisting of low shrubs. A few villages are scattered about it, and there is some rice cultivation.

We were detained here until the 1st of April, in order that we might repose after our fatigues ; but in reality to enable the Punukka people to get ready our accommodations. Wandipore, a well known castle situated in the Chillong pass, is just visible from Phain, below which it appears to be some 1200 feet, and about three miles to the south west. Its Zoompoor, one of the leading men in Bootan, made some ineffectual attempts to take us to Punukka viâ his own castle ; various were the artifices he resorted to for this purpose, but he failed in all. Among others, he sent a messenger to inform us that the Deb and Dhurma were both there, and very anxious to meet us, and that after the meeting they would conduct us to Punukka.

April 1st. To Punukka. We descended rather gradually towards the Patchien, proceeding at first north-west, and then to the north. On reaching the stream, which is of considerable size, we followed it up, chiefly along its banks, until we arrived at the capital, no view of which is obtained until it is approached very closely. The valley of the Patchien was throughout the march very narrow ; there was a good deal of miserable wheat cultivation in it, and some villages, all of moderate size. The country continued extremely bare. The distance was about eleven miles. Punukka, the second capital in Bootan, the summer residence of a long line of unconquered monarchs—Punukka to which place we had been so long looking forward with feelings of de-

light, although the experience of Tongsa ought to have taught us better, disappointed all of us dreadfully. For in the first place I saw a miserable village, promising little comfort as respects accommodation, and one glance at the surrounding country satisfied me that little was to be done in any branch of natural history. For a narrow, unfruitful valley, hemmed in by barren hills, on which no arboreous vegetation was to be seen, except at considerable elevation, gave no great promise of botanical success.

On reaching the quarters which had been provided for us, and which were situated in front of the palace, we were much struck with the want of care and consideration that had been shewn, particularly after the very long notice the Booteas had received of our coming, and the pressing invitations sent to meet us.

These quarters had evidently been stables, and consisted of a square enclosure surrounded by low mud walls. Above the stalls small recesses, scarcely bigger than the boxes which are so erroneously called a man's "long home," had been made for our special lodgements; that of the huzoor, Captain Pemberton, was somewhat larger, but still very much confined. Having added to these a roof formed of single mats, an oppressive sun, and a profusion of every description of vermin, Capt. Pemberton determined on renting quarters in the village, and this, owing to his liberality, was soon accomplished; and from the two houses we occupied did we alone obtain comfort among the numerous annoyances we were doomed to experience during our lengthened stay.

The capital of Bootan is for pre-eminence, miserable. The city itself consists of some twelve or fifteen houses, half of which are on the left bank of the river, and two-thirds of which are completely ruinous, and the best of these 'Capital' houses were far worse than those at Phain or Santagong. &c. Around the city, and within a distance of a quarter of a mile, three or four other villages occur, all bearing the stamp of poverty, and the marks of oppression.

The palace is situated on a flat tongue of land formed by the confluence of the Matchien and Patchien rivers. To the west it is quite close to the west boundary of the valley, the rivers alone intervening. It is a very large building, but too uniform and too heavy to be imposing: it is upwards of 200 yards in length, by perhaps 80 in breadth. Its regal nature is attested by the central tower, and the several coppered roofs of this.

The only cheering objects visible in this capital, are the glorious Himalayas to the north, and a Gylong village 12 or 1500 feet above the palace to the west; elsewhere all is dreary, desolate looking, and hot.

During the first few days of our stay, and indeed until our interview with the Deb, we were much annoyed by the intruding impertinence and blind obstinacy of his followers. They were continually causing disputes either with the sentries or our immediate followers, and it was only by repeated messages to the palace, stating the probable consequence of such a system of annoyance, that Captain Pemberton succeeded in obtaining any respite.

After many delays; we were admitted to the Deb's presence on the 9th. Leaving our ponies, we crossed the bridge built over the Patchien, which was lined with guards, and defended by some large, wretchedly constructed wall pieces. We then entered a paved yard, and thence ascended by some most inconvenient stairs to the palace, the entrance to which was guarded by a few household troops dressed in scarlet broad cloth. We then crossed the north quadrangle of the palace, which is surrounded with galleries and apartments, and was crowded with eager spectators, and ascending some still more inconvenient, or even dangerous stairs, reached a gallery, along which we proceeded to the Deb's receiving room, which is on the west face of the palace: at the door of this the usual delays took place, these people supposing that their importance is enhanced by the length of delay they can manage to make visitors submit to.

The Deb, who was an ordinary looking man, in good condition, received us graciously, and actually got up and received his Lordship's letter standing; the usual conversation then took place by means of interpreters, and the Deb having received his presents, and presented us with usual plantains, ghee, and some walnuts, dismissed us; and this was the first and last time I had the honour of seeing him, as I was indisposed at the time of our leaving. To return, the room was a good sized one, but rather low; it was supported by well ornamented pillars, hastily hung with scarfs and embroidered silk. The most amusing part of the ceremony was that exhibited by the accountant general's department, who were employed in counting and arranging courie shells—really emblematic of the riches of the kingdom—apparently with no other aim than to re-count, and re-arrange them, yet they were very busily engaged in writing the accounts. A day or two after, our interview with the Dhurma took place. He received us in an upper room of the quadrangular central tower: while we were in his presence we remained standing, in compliment to his religious character. The Dhurma Rajah is a boy of eight or ten years old, and good looking, particularly when the looks of his father, the Tungso Pillo, are taken into consideration. He sat in a small recess, lighted chiefly with lamps, and was prompted by a very venerable looking,

grey-headed priest. He had fewer attendants, and his room was less richly ornamented than that of the Deb. Around the room sat priests busily employed in muttering charmed sentences from handsome gilt lettered black books, which reminded me of those used in some parts of Burmah.

Very few of our attendants saw either of the Rajahs, and it was expected that no one would presume to enter the Dhurma's presence empty handed. To some of the sipahis, who were anxious to see him, his confidential advisers said, "Give forty rupees, come into the quadrangle under the Dhurma's window, and then you may see him, or you may not see him; I will not be answerable for any thing, but receiving the forty rupees."

During our protracted stay at this place, nothing particularly worthy of notice occurred. Intrigues seemed to be constantly going on, and the trial of temper on the part of Captain Pemberton must have been very great; it was however soon evident that no business could be transacted with a Bootea Government without being enabled first to enforce abundance of fear, and consequently any amount of agreement from them; messages to and fro passed continually, the bearer being a very great rascal, in the shape of the Deb's Bengal Moharrer. Thus he would come and appoint the next day for a meeting; then he would return and say, that such a place was better than such a place; as evening drew near he would come and say, unless you agree to such and such, there will be no meeting; and after bearing a message that no change in this respect would be made, he would make his appearance and say, all the minsters were sick, and so could not meet.

My only amusement out of doors was a morning walk up or down the valley. I was prompted to this chiefly by the pangs of hunger, as the Bootea supplies were very short, indeed wild pigeons afforded me at least some relief. During the day I examined such objects as my collectors brought in, for it was too hot to think of being out after 9 A. M. I also had a few Bootea patients, most of whom were labouring under aggravated forms of venereal.

The climate of Pুনukka has but little to recommend it, and in fact nothing, if viewed in comparison with the other places we had seen in Bootan. The greatest annoyance existed in the powerful winds blowing constantly throughout the day up the valley, and which were often loaded with clouds of dust. The mean temperature of April may be considered as 71°.

The maximum heat observed was 83°, the minimum 64°. The mean temperature of the first week of May was 75° 3'; the maximum

80°, and the minimum 70°. The cultivation in the valley, the soil of which seems very poor, containing a large proportion of mica, was during our stay limited to wheat and buck-wheat, but scarcely any of the former seemed likely to come to ear. Ground was preparing for the reception of rice, which is sown and planted in the usual manner. Crops just sown are immediately eaten up by the swarms of sacred pigeons that reside in the palace, so that husbandry is by no means profitable; more especially as there are other means of providing for the crops, such as they may be. Thus we saw several small fields, amounting perhaps to an acre in extent, cut down to provide fodder for some ponies that had lately shared in a religious excursion to Wandipore.

Cattle are not frequent. There were some pigs. The fowls were of the most miserable description, and very scarce. In spite of offers of purchase and plenty of promises, we were throughout allowed three a day, and they were rather smaller than pigeons. Towards the latter end of our stay, rice became bad and scarce.

We saw nothing indicating any degree of trade worth mentioning. Parties changing their residence frequently passed through from the north-east, generally accompanied by ponies, whose most common burdens appeared to be salt. No direct intercourse appears to exist with Thibet, as even the tea, which they consume in large quantities, is said to come from Paro Pillo's.

There are a great number of Assamese slaves about Punukka; indeed all the agricultural work, as well as that of beasts of burden, appears to devolve upon these unfortunate creatures, who are miserably provided for, and perhaps dirtier than a genuine Bootea himself. During my morning walks I was almost daily entreated for protection. In one case only, and in this by the merest accident, was Captain Pemberton enabled to get such evidence as authorised him to claim it as entitled to British protection. Connected with this case is an act of black treachery, to which I shall hereafter refer.

We stopt so long here, and we had daily so many instances proving that no confidence could be placed on any thing coming from the palace, that I began at last to despair of getting away. The old Deb was very anxious to see us, and the new Deb still more anxious that we should accompany him when he left Punukka, in the hope that the presence of the Mission would be advantageous to him.

It was entirely owing to the firmness of Captain Pemberton that we were enabled to avoid such a disagreeable meeting; and the Deb, feeling at last convinced that his views could not be carried into effect, gave orders for getting rid of us as speedily as possible; and on

with on this march. Near the summit, on the descent, a genuine larch was observed, and lower down two species of poplar were very common. The scenery was generally very beautiful. We passed a delightfully situated Gylong village not much below the summit, and near Woollookha saw Symtoka, a rather large square building belonging to the Deb Rajah, situated two or three hundred feet above our road.

Woollookha is a good sized village, and the houses are very good : it is close to the river Teemboo, which drains Tassisudon valley, a few miles distant to the north. There are several villages around it, and a good deal of cultivation of alternating crops of barley, wheat, and rice. The valley, if indeed it can be called so, for it is very narrow, is picturesque enough, although the surrounding hills are not well wooded. The banks of the river, which here flows gently enough, are well ornamented with weeping willows.

11th. We continued our route following the river, the path generally laying down its bed, or close to it, occasionally ascending two or three hundred feet above it. Halted at Lomnoo, an easy march. The features of the country remained the same until we neared our halting place, when woods of *Pinus excelsa* became very common ; roses occurred in profusion, and the vegetation generally consisted of shrubs ; villages were tolerably frequent, and the cuckoo* was again heard.

12th. To Chupcha. Continued for some time through a precisely similar country, still following the river, but generally at some height above its bed. After passing Panga, a small village at which our conductors wished us to halt, although it was only six miles from Somnoo, we descended gradually to the river Teemboo, and continued along it for some time, during which we passed the remains of a suspension bridge. Leaving the rivers soon afterwards, we encountered such a long ascent that we did not reach Chupcha till rather late in the evening, most of the coolies remaining behind. Having surmounted the ridge immediately above Chupcha, and which is about 8600 feet in altitude, we descended very rapidly to the village, which is about 600 feet lower down the face of the mountain. The road was for the most part tolerably good ; in one place it was built up along the face of a cliff overhanging the Teemboo. The scenery was throughout pretty, but especially before coming on the ascent : some of the views along the river were very picturesque.

* The first time I heard this bird was about Punukka. Although in plumage it differs a good deal from the bird so well known in Europe, yet its voice is precisely similar.

After leaving Panga no villages were passed, and one small one only was seen on the opposite bank of the Teemboo ; but up to the above mentioned place the country continued tolerably populous. The vegetation, until the ascent was commenced, was a good deal like that about Somnoo, *Pinus excelsa* forming the predominant feature. From the base of the ascent it became completely changed—oaks forming the woods, and from 7500 feet upwards, various rhododendrons occurring in profusion, mixed with wild currants, &c. We were detained at Chupcha for two days, at the end of which the last coolies had scarcely arrived : it is ten miles from Somnoo, and sixteen miles from Panga, and about 8100 feet in elevation, The greatest ascent, and this too after a march of twelve miles, must have been between 2500 and 3000 feet. We were lodged comfortably in the castle, although it was not white-washed, nor had it the insignia of a belt of red ochre. It is a short distance from the village, which again is two or three hundred yards to the west of the direct road. We thought Chupcha a delightful place : the scenery is varied, the temperature delightful, varying in doors from 46° to 52°

The face of the mountain although very steep, is about the castle well cultivated : the crops which were of six ranked barley, were very luxuriant, and certainly the finest we ever saw in the country. The red-legged crow recurréd here. During our stay, I ascended the ridge immediately above the castle, passing through a very large village of Gylongs, elevated at least 9000 feet. This village was the largest I saw in Bootan, and was ornamented with a pretty religious building, surrounded by junipers, and more decorated than such edifices usually are. Up to the village the path passed through beautiful woods of *Pinus excelsa* : above it I came on open sward, which continued on the south face up to the very summit of the ridge, which was nearly 11,000 feet. The north face of the mountain was well wooded : on it rhododendrons, a few black pines, beautiful clumps of *Pinus Smihiana*, Bogh Pat, Mountain Pears, Aconites, Columbines, Saxifrages, Primroses, &c. were found in abundance. The southern face was decorated with a pretty yellow Anemone, and the pink spikes of a Bistort. From the ridge still loftier ones were visible in every direction, all of which were covered with snow, which lightly sprinkled the one on which I stood. At this season snow scarcely remains for a day under 11,000 feet, except in very sheltered situations.

15th. I left Chupcha with much regret. We descended by a precipitous path to a torrent about 1800 feet below the castle. Crossing this, we descended gradually until we came on the ravine of the

Teemboo; at which point there is a small pagoda, visible from Chupcha. We then turned southwards, and continued for a long time at nearly the same level, passing a small village, Punugga, three or four hundred feet below us, and in which Capt. Turner had halted on his ascent. The descent to Chuka was long and gradual, becoming tolerably steep as we approached it. We reached the Teemboo by a miserable road, about half a mile from Chuka castle, which occupies a small eminence in what has once been the bed of the river.

The march was seventeen miles. The road in many places was very bad, and scarcely passable for loaded ponies. The scenery was frequently delightful, and vegetation was in the height of spring luxuriance. The hills bounding the ravine of Teemboo continued very high until we reached Chuka; they were well diversified, particularly at some height above us, with sward and glade, and richly ornamented with fine oaks, rhododendrons, cedar-like pines, and *Pinus excelsa*. Water was most abundant throughout the march, and in such places the vegetation was indescribably rich and luxuriant.

No village besides that of Punugga was passed or seen, nor did I observe any cultivation. I was much impeded by droves of cattle passing into the interior, for the road was frequently so narrow, and the mountains on which it was formed so steep, that I was obliged to wait quietly until all had passed. These cattle were of a different breed from those hitherto seen in Bootan, approaching in appearance the common cattle of the plains, than which however they were much finer and larger.

We were sufficiently well accommodated in the castle of Chuka, which is as bare of ornament as its neighbour of Chupcha; it is a place of some strength against forces unprovided with artillery, and commands the pass into the interior very completely. There is a miserable village near it, and several trees of the *Ficus elastica*.

16th. To Murichom. We descended to the Teemboo, which runs some fifty feet below the castle, and crossed it by a suspension bridge, of which a figure has been given by Capt. Turner; it is very inferior in size and construction to that of Rassong, although, unlike that, it is flat at the bottom. We continued following the Teemboo winding gradually up its right bank, chiefly through rather heavy jungle, and descending subsequently about 600 feet to its bed by a dreadfully dangerous path, built up the face of a huge cliff. We continued along it until we crossed a small torrent at its junction with the large river, and then ascended gradually, following the ravine of this through humid jungle. As we approached Murichom we left the Teemboo a little to our left, and continued through a heavily

wooded country. Before ascending finally to Murichom, we descended twice to cross torrents. We reached Murichom late in the evening, the distance being eighteen miles.

No villages were seen until we came in sight of Murichom. The mountains were much decreased in height, and clothed with dense black jungle. We passed two water-falls, both on the left bank of the Teemboo, the one most to the south being the *Minza peeya* of Turner. Neither of them appeared particularly worthy of notice. The vegetation had almost completely changed, it partook largely of the sub-tropical characters, scarcely a single European form being met with. The road was absolutely villainous,* it was very narrow, frequently reduced to a mere ledge, and painful owing to the sharp projections of the limestone, the prevailing rock of this part of the country. Murichom is a small village, rather more than 4000 feet above the sea; the houses, which are about eight or ten in number, are thatched: it is prettily situated: there is a little cultivation of wheat and maize about it. Although at so considerable an elevation, most of the plants were similar to those of Assam.

17th. Leaving Murichom we descended rapidly to a small torrent, from which we re-ascended until we had regained the level of Murichom. The path then wound along through heavily wooded country at an elevation of 4000 or 4200 feet: we continued thus throughout the day. At 5 P. M. finding that the coolies were commencing to stop behind, and failing in getting any information of my companions, I returned about $1\frac{1}{2}$ mile to the small village of Gygoogoo, which is about 300 feet below the path, and not visible from it. It is a miserable village of three or four bamboo huts. We had previously passed another and much better village, but as this was only six miles from Murichom, Capt. Pemberton determined to push on.

18th. I proceeded to Buxa. The path was somewhat improved, and the ascent gradual until an elevation of about 5500 feet was surmounted, from which the descent to Buxa is steep and uninterrupted. This place is seen from a ridge about 1200 feet above it. I reached it between 9 and 10 A. M., and found that my companions had arrived late on the preceding evening, having accomplished a march of twenty miles in one day. Scarcely any coolies had arrived, however, before me. The features of the country remained the same, the whole face being covered with dense black looking forest. Even on

* Such is the nature of the path from Chuka to the plains, although it is the great thoroughfare between both capitals and Rungpore, that either the trade of Bootan with that place must be much exaggerated, or some other road must exist between these two points.

the ridge, which must have been between 5000 and 5500 feet in elevation, scarcely any change took place. As I descended to Buxa vegetation became more and more tropical, and on reaching it found myself surrounded with plants common in many parts of the plains of Assam.*

Buxa is rather a pretty place, about 2000 feet above the sea. The only decent house in it is that of the Soobah, who is of inferior rank. The huts are of the ordinary description, and do not exceed twelve in number. The Soobah's house, with some of those of Bengal officers, occupy a low rising ground in the centre of the pass, which is divided from the hills on either side by a small torrent. A view of the plains is obtainable from this place.

Captain Pemberton left Buxa a day before me, as I was detained behind for coolies, none of whom had yet arrived. On the following day I rejoined him at Chicha-cotta. The descent to the plains is steep at first, and commences about a quarter of a mile from Buxa. On reaching the steep portion a halting place, called Minagoung, is passed, at which place, all bullocks, which are here used as beasts of burden, are relieved if bound to Buxa, or provided with burdens, if bound for the plains. The descent from this place is very gradual, and scarcely appreciable; the path was good, and bore appearances of being tolerably well frequented; it passed through a rather open forest, low grasses forming the under-plants. The plains were not reached for several miles, indeed the descent was so gradual, that the boundaries of the hills and those of the plains were but ill defined. At last however the usual Assam features of vast expanses of grassy vegetation, interrupted here and there with strips of jungle, presented themselves. The country is very low, entirely inundated during the rains, and almost uninhabited. Saul occurred toward that which may be considered the Toorai of these parts, but the trees were of no size.

Chicha-cotta is eighteen miles from Buxa, and is situated on a grassy plain; it is small and miserably stockaded, nor is there any appearance about the place indicative of comfort or security. To Koolta. We continued through nearly a desolate country, overrun with coarse grasses, until we came on the river, which is of considerable width, but fordable; we now found ourselves in the Cooch-Behar territory, and were much struck with the contrast between its richly cultivated state, and the absolute desolation of that belonging to Bootan. We continued traversing a highly fertile country, teeming with population,

* Plantains, jacks, mangoes, figs, oranges, &c., are found about the huts of Buxa.



Lakes frozen to a great depth upon which we skated in Dec. 1783

Teuna
Chamularee Mountain covered with snow all the Year of Boodan & Tibet

Scale 32 Miles to an inch